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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,761	01/29/2004	Clark Bendall	702-102	7060

20874 7590 11/08/2006

WALL MARJAMA & BILINSKI  
101 SOUTH SALINA STREET  
SUITE 400  
SYRACUSE, NY 13202

EXAMINER
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SMITH, PHILIP ROBERT

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/768,761

Applicant(s)

BENDALL ET AL.

Examiner

Philip R. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 15, 16 and 35-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-14 and 17-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/14/04, 11/17/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: IDS 3/3/2006.

## **DETAILED ACTION**

### **Restrictions**

- [01] Claims 1-9, 15-16, 35-40 are withdrawn without traverse from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, as per the correspondence of 9/11/2006.

### **Specification**

- [02] The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### **Claim Objections**

- [03] Claim 19 is objected to because of the following informalities: "base unit" should read "base unit element." Appropriate correction is required.

### **Claim Rejections - 35 USC § 103**

- [04] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- [05] Claims 10, 12-14, 17, 19-21, 23-26, 28, 30, 33 & 34 are rejected under 35 U.S.C. 102(b) as being unpatentable over Murata (2001/0051762) in view of Chikama (5,002,041).

- [06] With regard to claims 10,21: Murata discloses a modular visual inspection system

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for viewing the interior of a structure, comprising:

[06a] a base unit element comprising a memory element ("memory card 113," [0103], a processor element ("image processing circuit 111," [0103]), and a modular light source ("lamp 64," [0058]);

[06b] a control and display element comprising a screen element for viewing the interior of the structure ("display device 10," [0045]) and an articulation control element ("motor-driven angling unit 17," [0046]);

[06c] an insertion element for imaging the interior of the structure comprising an imaging sensor ("charge-coupled device (CCD) 41," [0053]) and an elongated portion ("elongated insertion member 2 that is flexible," [0045]);

[06d] wherein the base unit element is in electro-optical communication with the control and display element.

[07] Murata does not disclose that there are a plurality of insertion elements, wherein each one of said plurality of insertion elements can be used without modification with said control and display element.

[08] It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide multiple insertion elements, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. A skilled artisan would be motivated to do so in order to provide a backup insertion element in the case of contamination or malfunction.

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[09] Murata does not disclose that the elongated portion is braided.

[10] Chikama discloses the following in 1/52-59:

A conventional insertion portion (flexible tube structure) for an endoscope ... comprises a holder coil formed by winding a strip-like plate, a braid tube formed around the outer periphery of the holder coil, and an outer sheath of a resin covering the braid tube.

[11] At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use convention elements in the construction of Murata's elongated portion. Braids are conventionally used to construct elongated insertion portions in endoscopes because they are strong and flexible.

[12] With regard to claims 13,14,17: Murata discloses an aperture ("card connector 112," [0103]) to allow insertion of an electronic storage media comprising a PC cards ("113," as noted above).

[13] With regard to claim 12: Murata discloses a keyboard ("152," [0130], Fig 12).

[14] With regard to claims 19,20: Murata discloses that the base unit further comprises at least one connectivity element, wherein the at least one connectivity element is a serial port ("serial communication," [0131]).

[15] With regard to claim 23: Murata discloses a storage reel ("cylindrical drum 4" [0045]) for storing said insertion element.

[16] With regard to claim 24: Murata discloses a weatherproof container element ("a box-like main unit 5," [0045]) sized such that the base unit element fits within the container element.

[17] With regard to claim 26: Murata discloses an LCD ("LCD panel of the display

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device 10," [0056]) which is inherently capable of showing images in a 16:9 format.

[18] With regard to claim 28: Murata discloses a joystick ("remote control unit 8," [0047]).

[19] With regard to claim 30: Murata discloses at least one servo motor ("motor-driven angling unit 17," [0046]).

[20] With regard to claim 33: The memory element disclosed by Murata is capable of storing data representing images ([0103]).

[21] With regard to claim 34: Murata discloses that the memory element of the base unit element includes a computer program for generating reports ("reading or writing..." [0103]) based on data obtained by the imaging sensor of each of said plurality of insertion elements.

### **Additional Claim Rejections - 35 USC § 103**

[22] Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata in view of Pearlman (5,347,992).

[23] Murata does not disclose a fluid reservoir.

[24] Pearlman discloses the following in 1/11-23:

During endoscopic procedures, the surgeon must frequently irrigate and then suction a region in which he is operating. He is customarily provided with a handpiece that includes two trumpet-type valves, one for the liquid and the other for suction. His task in addition to manipulation of the various optical and surgical appliances associated with an endoscope is to irrigate regions of interest, and to suction out liquids and debris. Anything which can simplify this assortment of tasks is a welcome improvement. Convenience of grasp is a further convenience. If an appliance can only be gripped in one orientation, it is likely that in other alignments it will be inconvenient to manipulate.

[25] At the time of the invention, it would have been obvious to a person of ordinary

skill in the art that the endoscope disclosed by Murata have an irrigation channel which necessitates a fluid reservoir, as disclosed by Pearlman. A skilled artisan would be motivated to do so because endoscopic procedures conventionally require irrigation of regions of interest; and irrigation requires a fluid reservoir from which to draw irrigation fluid.

**Additional Claim Rejections - 35 USC § 103**

[26] Claims 18, 22, 29, 31, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata in view of Saito (6,184,922).

[27] With regard to claim 18: Murata does not disclose that the processor element of the base unit element is capable of video compression.

[27a] Saito discloses a "motion-picture data compressing means" (4/42) which compresses endoscope images prior to storage. At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the memory element disclosed by Murata store compressed images as taught by Saito. A skilled artisan would be motivated to do so in order to reduce the required size of the memory element, or to allow a greater amount of data to be stored on a memory element of finite size.

[28] With regard to claim 22: Murata does not disclose that the modular light source is selected from the group of light sources consisting of: LEDs, arc discharge lamps, lasers, UV lamps, and IR lamps.

[28a] Saito discloses an arc discharge lamp ("white light source 121 such as a

xenon lamp" (14/49). At the time of the invention, it would have been obvious to a person of ordinary skill in the art that in reduction to practice the lamp disclosed by Murata take the particular form of an arc discharge lamp. A skilled artisan would be motivated to do so in order to provide strong white light, as xenon lamps are well known to provide.

[29] With regard to claim 29: Murata does not disclose a switch to freeze an image displayed by said control and display element.

[29a] Saito discloses a "release switch 48" (5/54-60) which freezes a displayed image in the form of a "still image to be recorded." At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a freeze switch in the control and display element disclosed by Murata. A skilled artisan would be motivated to do so in order to allow a still image to be recorded to be viewed at a later date.

[30] With regard to claims 31,32: Murata does not disclose that the image sensor gathers sufficient data to create a selected video signal selected from the group of video signals consisting of: PAL, NTSC, and progressive scan.

[30a] Saito discloses a "light source unit 103" which "agree[s] with the frame frequency of a video signal (29.97 Hz in the NTSC system). At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the displayed video signal disclosed by Murata take the particular form of an NTSC signal. A skilled artisan would be motivated to use



conventional elements. In reduction to practice, NTSC is a conventional video signal.

**Additional Claim Rejections - 35 USC § 103**

[31] Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata.

[32] Murata discloses a control and display element, but does not disclose an anti-glare element.

[33] At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the control and display element disclose by Murata comprise an anti-glare element. A skilled artisan would be motivated to do so in order to enable better viewing of images.

**Conclusion**

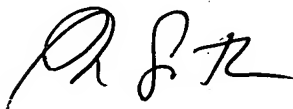
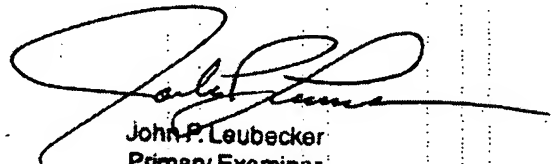
[34] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Motoki (6,569,086; 2002/0026096) discloses an endoscope have joystick control. Hibino (5,243,967) discloses an endoscope having a fluid reservoir and a freeze switch.

[35] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R. Smith whose telephone number is (571) 272.6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.

[36] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.

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[37] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'R. S. K.', located on the left side of the page.A handwritten signature in black ink, appearing to be 'John P. Leubecker', located on the right side of the page.  
John P. Leubecker  
Primary Examiner